## What is claimed is:

- 1. A selectively light-absorptive material for a color display,
- 2 comprising a tetrazaporphyrine derivative having formula (1)

where R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> are independently selected from the group consisting of hydrogen; an unsubstituted phenyl group, an alkyl group 4 of 1 to 8 carbon atoms; an alkoxy group of 1 to 8 carbon atoms; a nitro group; 5 halogen atoms; a halide; a cyano group; an alkylamino group of 1 to 8 carbon 6 atoms; an aminoalkyl group of 1 to 8 carbon atoms; and a phenyl group having 7 a substitutent selected from an alkyl group of 1 to 8 carbon atoms, an alkoxy 8 group of 1 to 8 carbon atoms, a nitro group, halogen atoms, a halide, an 9 alkylamino group of 1 to 8 carbon atoms, an aminoalkyl group of 1 to 8 carbon 10 atoms and a cyano group, or two neighboring substituents among R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, 11 R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> are fused and substituted with 1 to 3 aromatic cyclic 12 compounds having formula (2a) through (2g), and unsubstituted groups 13 among R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> are independently selected from the 14 group consisting of hydrogen, an alkyl group of 1 to 8 carbon atoms, an alkoxy 15 group of 1 to 8 carbon atoms, an allyl group, halogen atoms, a halide, a cyano 16 group and a nitro group 17

20

(2e)

where R', R", R" and R"' are independently selected from the group consisting of hydrogen, an alkyl group of 1 to 8 carbon atoms, an alkoxy group of 1 to 8 carbon atoms, an allyl group, a cyano group and a nitro group; X is halogen atoms or alkyl sulfonate of 1 to 8 carbon atoms; Y is an alkyl or allyl group of 1 to 8 carbon atoms; and dashed lines indicate a portion coupled with the pyrrole group of formula (1).

2. A selectively-light absorptive material for a color display,

(2f)

19

20

21

2 comprising tetrazaporphyrine derivative having formula (3)

where  $R_1,\,R_2,\,R_3,\,R_4,\,R_5,\,R_6,\,R_7$  and  $R_8$  are independently selected from the group consisting of hydrogen; an unsubstituted phenyl group, an alkyl group 4 of 1 to 8 carbon atoms; an alkoxy group of 1 to 8 carbon atoms; a nitro group; 5 halogen atoms; a halide; a cyano group; an alkylamino group of 1 to 8 carbon 6 atoms; an aminoalkyl group of 1 to 8 carbon atoms; and a phenyl group having 7 a substitute group selected from an alkyl group of 1 to 8 carbon atoms, an 8 alkoxy group of 1 to 8 carbon atoms, a nitro group, halogen atoms, a halide, 9 an alkylamino group of 1 to 8 carbon atoms, an aminoalkyl group of 1 to 8 10 carbon atoms and cyano groups, or two neighboring substituents among R<sub>1</sub>, 11 R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> are fused and substituted with 1 to 3 aromatic 12 cyclic compounds having formula (2a) through (2g), and unsubstituted groups 13 among R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> are independently selected from the 14 group consisting of hydrogen, an alkyl group of 1 to 8 carbon atoms, an alkoxy 15 group of 1 to 8 carbon atoms, an allyl group, halogen atoms, a halide, a cyano 16 group and a nitro group; 17 18

M is metal ions with an oxidation number of 2 capable of being complexed with the tetrazaporphyrine ring, or metal ions having ligands with an oxidation number of 2 capable of being complexed with the tetrazaporphyrine rings

(2e)

where R', R", R" and R"' are independently selected from the group consisting of hydrogen, an alkyl group of 1 to 8 carbon atoms, an alkoxy group of 1 to 8 carbon atoms, an allyl group, a cyano group and a nitro group; X is halogen atoms or alkyl sulfonate of 1 to 8 carbon atoms; Y is an alkyl or allyl group of 1 to 8 carbon atoms; and dashed lines indicates a portion coupled with the pyrrole group of formula (3).

(2f)

3. The selectively light-absorptive material of claim 1 or 2, wherein two neighboring substituents among R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> are fused with each other to form 2 to 3 cyclic compounds having formula (2a) of claim

- 2, and in the cyclic compound having formula (2a), at least one of R', R", R"
- and R"" is an alkyl group of 2 to 6 carbon atoms or an alkoxy group of 2 to 6
- 6 carbon atoms.
- The selectively light-absorptive material of claim 1 or 2, wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> are independently selected from an unsubstituted phenyl group, or a substituted phenyl group having 1 to 5 substituents selected from the group consisting of an alkyl group of 1 to 8 carbon atoms, an alkoxy group of 1 to 8 carbon atoms, a nitro group, halogen atoms, an alkylamine group of 1 to 8 carbon atoms, an aminoalkyl group of 1 to 8 carbon atoms, and a cyano group.
- The selectively-light absorptive material of claim 1, wherein the tetrazaporphyrine derivative having formula (1) is selected from the following compounds.

- 1 6. The selectively-light absorptive material of claim 2, wherein M
  2 is nickel (Ni), magnesium (Mg), manganese (Mn), cobalt (Co), copper (Cu),
  3 ruthenium (Ru) or vanadium (V), or Mn or Ru coordinated with at least one
  4 ligand selected from ammonia, water and halogen atoms.
- The selectively-light absorptive material of claim 2, wherein the tetrazaporphyrine derivative having formula (3) is selected from the following compounds

- 1 8. A selectively light-absorptive coating composition comprising at 2 least one of the selectively light-absorptive materials of claims 1 through 7, a 3 plastic resin and an organic solvent.
- The selectively light-absorptive coating composition of claim 8, wherein the plastic resin is at least one selected from the group consisting of poly(methylmethacrylate), polyvinyl alcohol, polycarbonate, ethylene vinylacetate and polyvinylbutyral.
- 1 10. The selectively light-absorptive coating composition of claim 8,
  2 wherein the organic solvent is at least one selected from the group consisting
  3 of toluene, xylene, propylalcohol, isopropylalcohol, methylcellosolve,
  4 ethylcellosolve and dimethylformamide.
- 1 11. The selectively light-absorptive coating composition of claim 8, further comprising an infrared ray blocking agent.
- 1 12. The selectively light-absorptive coating composition of claim 8, further comprising a dye.
- 1 13. A selectively light-absorptive filter for a color display, comprising 2 at least one of the selectively light-absorptive materials of claim 1 through 7, 3 and a plastic resin.
- 1 14. The selectively light-absorptive filter of claim 14, wherein the 2 plastic resin is at least one selected from the group consisting of 3 poly(methylmethacrylate), polyvinyl alcohol, polycarbonate, ethylene 4 vinylacetate and polyvinylbutyral.